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APPLICANT : KOBE STEEL LTD;

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TITLE : MARAGING STEEL WITH SUPERIOR STRESS CORROSION CRACK RESISTANCE

ABSTRACT : PURPOSE: To improve the stress corrosion crack resistance of a maraging steel contg. 12~18% Ni by regulating the impurity Cu content of the steel and adding a specified amount of Ti and Ca or a rare earth element.

CONSTITUTION: 0.1~1.8% Ti and 0.001~0.1% Ca and/or Mg are added to a maraging steel contg. <0.03% C, <0.1% Si, <0.1% Mn, <0.01% P, <0.01% S, <0.01% Cu, 10.0~19.0% Ni, <9.0% Cr, 2.0~12.0% Mo, <16.0% Co and <0.5% Al. In place of the Ca or Mg a 0.003~0.1% rare earth element may be added, or 0.001~0.1% in total of Ca and/or Mg and a rare earth element may be added. The resulting steel has remarkably improved stress corrosion crack resistance as compared with a conventional maraging steel having a basic composition contg 12~18% Ni.

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